

Appendix D: Year Two Student Survey Data Tables

During the ‘pre’ window (November and December, 2007), a total of 96,780 students throughout the State of Pennsylvania took the Classrooms for the Future Student Survey. In May of 2008, 89,302 students took an identical ‘post survey.’ Pre and post responses were analyzed to understand changes during the five-to-six months of implementation between surveys, and the results of these analyses are presented below.

| Q1 My classes are helping me build skills that will help me be successful in the modern workplace. | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 21.00% | 24.00% | 3.00% | 294.68 | 4.00 | p<.001 |
| Agree | 52.00% | 49.00% | -3.00% | | | |
| Neutral | 21.00% | 20.00% | -1.00% | | | |
| Disagree | 4.00% | 4.00% | 0.00% | | | |
| Strongly Disagree | 2.00% | 3.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

Percent of Time Teacher spends on certain Activities

| Q2_A Time on activities: Leading whole class discussions | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all | 24.00% | 24.00% | 0.00% | 108.38 | 4.00 | p<.001 |
| More than half | 32.00% | 31.00% | -1.00% | | | |
| About half | 26.00% | 26.00% | 0.00% | | | |
| Some, but less than half | 14.00% | 14.00% | 0.00% | | | |
| Rarely or none of the time | 4.00% | 5.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q2_B Time on activities: Lecturing or telling us about the subject | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all | 26.00% | 26.00% | 0.00% | 70.33 | 4.00 | p<.001 |
| More than half | 32.00% | 30.00% | -1.00% | | | |
| About half | 26.00% | 27.00% | 1.00% | | | |
| Some, but less than half | 14.00% | 14.00% | 0.00% | | | |
| Rarely or none of the time | 3.00% | 3.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q2_C Time on activities: Working with small groups of students | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all | 10.00% | 11.00% | 1.00% | 113.23 | 4.00 | p<.001 |
| More than half | 17.00% | 18.00% | 0.00% | | | |
| About half | 25.00% | 27.00% | 1.00% | | | |
| Some, but less than half | 31.00% | 30.00% | -2.00% | | | |
| Rarely or none of the time | 16.00% | 15.00% | -1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q2_D Time on activities: Working with individual students | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all | 11.00% | 12.00% | 1.00% | 122.92 | 4.00 | p<.001 |
| More than half | 17.00% | 17.00% | 0.00% | | | |
| About half | 23.00% | 25.00% | 2.00% | | | |
| Some, but less than half | 31.00% | 30.00% | -2.00% | | | |
| Rarely or none of the time | 17.00% | 16.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q2_E Time on activities: Walking around the classroom observing and helping students | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all | 29.00% | 27.00% | -2.00% | 200.46 | 4.00 | p<.001 |
| More than half | 24.00% | 23.00% | 0.00% | | | |
| About half | 21.00% | 23.00% | 2.00% | | | |
| Some, but less than half | 17.00% | 17.00% | 0.00% | | | |
| Rarely or none of the time | 9.00% | 10.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

Percent of Class Time on Certain Activities

| Q3_A Time on thinking activity: Really complex thinking and problem-solving | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Almost all of the time | 12.00% | 12.00% | 1.00% | 289.11 | 4.00 | p<.001 |
| Quite a lot | 28.00% | 26.00% | -2.00% | | | |
| Some | 37.00% | 36.00% | -1.00% | | | |
| A little | 16.00% | 16.00% | 0.00% | | | |
| None or almost none | 7.00% | 9.00% | 2.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q3_B Time on thinking activity: Learning processes | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Almost all of the time | 19.00% | 17.00% | -1.00% | 433.24 | 4.00 | p<.001 |
| Quite a lot | 36.00% | 33.00% | -3.00% | | | |
| Some | 29.00% | 31.00% | 2.00% | | | |
| A little | 11.00% | 12.00% | 1.00% | | | |
| None or almost none | 5.00% | 6.00% | 2.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q3_C Time on thinking activity: Learning information by listening or reading | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Almost all of the time | 25.00% | 24.00% | -1.00% | 133.98 | 4.00 | p<.001 |
| Quite a lot | 36.00% | 35.00% | -1.00% | | | |
| Some | 25.00% | 27.00% | 2.00% | | | |
| A little | 10.00% | 10.00% | 0.00% | | | |
| None or almost none | 4.00% | 4.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q3_D Time on thinking activity: Just kind of sitting back and not really concentrating on anything | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Almost all of the time | 6.00% | 9.00% | 2.00% | 1044.63 | 4.00 | p<.001 |
| Quite a lot | 9.00% | 11.00% | 2.00% | | | |
| Some | 15.00% | 17.00% | 3.00% | | | |
| A little | 26.00% | 25.00% | -1.00% | | | |
| None or almost none | 44.00% | 38.00% | -5.00% | | | |
| Total | 100.00% | 100.00% | | | | |

Decisions made about Classroom Activities

| Q4_A Decisions made about aspect in class: The topics studied | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| The teacher, completely | 64.00% | 60.00% | -3.00% | 321.80 | 4.00 | p<.001 |
| The teacher, mostly | 25.00% | 26.00% | 1.00% | | | |
| Half and half | 9.00% | 11.00% | 2.00% | | | |
| Students, mostly | 1.00% | 1.00% | 0.00% | | | |
| Students, completely | 1.00% | 1.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q4_B Decisions made about aspect in class: The way in which we study the topics | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| The teacher, completely | 33.00% | 34.00% | 0.00% | 35.30 | 4.00 | p<.001 |
| The teacher, mostly | 36.00% | 36.00% | -1.00% | | | |
| Half and half | 22.00% | 22.00% | 1.00% | | | |
| Students, mostly | 6.00% | 6.00% | 0.00% | | | |
| Students, completely | 2.00% | 3.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q4_C Decisions made about aspect in class: Whether we work together or alone | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| The teacher, completely | 35.00% | 33.00% | -2.00% | 189.88 | 4.00 | p<.001 |
| The teacher, mostly | 33.00% | 32.00% | -1.00% | | | |
| Half and half | 25.00% | 27.00% | 2.00% | | | |
| Students, mostly | 6.00% | 6.00% | 1.00% | | | |
| Students, completely | 2.00% | 2.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q4_D Decisions made about aspect in class: The specific topics of papers or assignments | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| The teacher, completely | 55.00% | 51.00% | -4.00% | 567.63 | 4.00 | p<.001 |
| The teacher, mostly | 28.00% | 28.00% | 0.00% | | | |
| Half and half | 13.00% | 16.00% | 3.00% | | | |
| Students, mostly | 3.00% | 4.00% | 0.00% | | | |
| Students, completely | 1.00% | 2.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q4_E Decisions made about aspect in class: The criteria for grading assignments | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| The teacher, completely | 76.00% | 72.00% | -4.00% | 527.04 | 4.00 | p<.001 |
| The teacher, mostly | 16.00% | 17.00% | 1.00% | | | |
| Half and half | 6.00% | 9.00% | 2.00% | | | |
| Students, mostly | 1.00% | 1.00% | 0.00% | | | |
| Students, completely | 1.00% | 1.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

Student Interest

| Q5_A In this class, the topics just Don't interest me, so I do just enough to get by | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 10.00% | 13.00% | 3.00% | 622.92 | 4.00 | p<.001 |
| Agree | 15.00% | 16.00% | 1.00% | | | |
| Neutral | 26.00% | 28.00% | 1.00% | | | |
| Disagree | 31.00% | 28.00% | -3.00% | | | |
| Strongly Disagree | 17.00% | 15.00% | -2.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q5_B Some of the topics in my classes have been so interesting that I have done more reading or research outside of class | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 7.00% | 9.00% | 2.00% | 389.31 | 4.00 | p<.001 |
| Agree | 19.00% | 20.00% | 2.00% | | | |
| Neutral | 30.00% | 30.00% | 0.00% | | | |
| Disagree | 26.00% | 23.00% | -3.00% | | | |
| Strongly Disagree | 18.00% | 18.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q5_C This year, my classes have been more interesting than last year. | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 21.00% | 20.00% | 0.00% | 58.39 | 4.00 | p<.001 |
| Agree | 34.00% | 33.00% | -1.00% | | | |
| Neutral | 29.00% | 31.00% | 1.00% | | | |
| Disagree | 10.00% | 9.00% | -1.00% | | | |
| Strongly Disagree | 7.00% | 7.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

Percent of Class Time spent on Certain Activities

| Q6_A Percentage of time students spend on: Listening to the teacher | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| More than 80% | 32.00% | 32.00% | 0.00% | 234.08 | 4.00 | p<.001 |
| 61 to 80% | 38.00% | 36.00% | -2.00% | | | |
| 41 to 60% | 20.00% | 21.00% | 2.00% | | | |
| 21 to 40% | 7.00% | 7.00% | 0.00% | | | |
| 0 to 20% | 3.00% | 4.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q6_B Percentage of time students spend on: Listening to other students | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| More than 80% | 12.00% | 12.00% | 0.00% | 84.53 | 4.00 | p<.001 |
| 61 to 80% | 24.00% | 23.00% | -1.00% | | | |
| 41 to 60% | 24.00% | 24.00% | 0.00% | | | |
| 21 to 40% | 20.00% | 20.00% | 0.00% | | | |
| 0 to 20% | 19.00% | 20.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q6_C Percentage of time students spend on: Working by myself | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| More than 80% | 16.00% | 16.00% | 0.00% | 59.08 | 4.00 | p<.001 |
| 61 to 80% | 23.00% | 23.00% | 0.00% | | | |
| 41 to 60% | 26.00% | 27.00% | 1.00% | | | |
| 21 to 40% | 21.00% | 20.00% | -1.00% | | | |
| 0 to 20% | 13.00% | 13.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q6_D Percentage of time students spend on: Working in groups | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| More than 80% | 13.00% | 13.00% | 1.00% | 101.60 | 4.00 | p<.001 |
| 61 to 80% | 24.00% | 24.00% | 0.00% | | | |
| 41 to 60% | 26.00% | 28.00% | 1.00% | | | |
| 21 to 40% | 21.00% | 20.00% | -1.00% | | | |
| 0 to 20% | 16.00% | 15.00% | -1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q6_E Percentage of time students spend on: Talking with the teacher _one to one_ | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| More than 80% | 7.00% | 8.00% | 1.00% | 162.02 | 4.00 | p<.001 |
| 61 to 80% | 13.00% | 13.00% | 1.00% | | | |
| 41 to 60% | 18.00% | 19.00% | 1.00% | | | |
| 21 to 40% | 26.00% | 23.00% | -2.00% | | | |
| 0 to 20% | 36.00% | 36.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q6_F Percentage of time students spend on: Working with the teacher in a small group | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| More than 80% | 5.00% | 6.00% | 1.00% | 304.81 | 4.00 | p<.001 |
| 61 to 80% | 10.00% | 11.00% | 1.00% | | | |
| 41 to 60% | 16.00% | 17.00% | 1.00% | | | |
| 21 to 40% | 24.00% | 22.00% | -2.00% | | | |
| 0 to 20% | 45.00% | 43.00% | -2.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q6_G Percentage of time students spend on: Not on task | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| More than 80% | 7.00% | 9.00% | 2.00% | 615.52 | 4.00 | p<.001 |
| 61 to 80% | 10.00% | 12.00% | 1.00% | | | |
| 41 to 60% | 14.00% | 15.00% | 2.00% | | | |
| 21 to 40% | 19.00% | 18.00% | -1.00% | | | |
| 0 to 20% | 49.00% | 45.00% | -4.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q6_H Percentage of time students spend on: Using technology | | | | | | |
|---|---------|---------|---------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| More than 80% | 12.00% | 19.00% | 7.00% | 6709.15 | 4.00 | p<.001 |
| 61 to 80% | 17.00% | 23.00% | 7.00% | | | |
| 41 to 60% | 21.00% | 25.00% | 4.00% | | | |
| 21 to 40% | 22.00% | 18.00% | -4.00% | | | |
| 0 to 20% | 28.00% | 15.00% | -13.00% | | | |
| Total | 100.00% | 100.00% | | | | |

Amount of Grade from various forms of Assessment

| Q7_A Amount of your grade from: Class participation | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all of the grade | 9.00% | 10.00% | 1.00% | 314.89 | 4.00 | p<.001 |
| More than half of the grade | 11.00% | 11.00% | 0.00% | | | |
| About half of the grade | 20.00% | 21.00% | 1.00% | | | |
| Some, but less than half of the grade | 45.00% | 41.00% | -4.00% | | | |
| None or almost none | 15.00% | 17.00% | 2.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q7_B Amount of your grade from: Quizzes and tests | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all of the grade | 22.00% | 23.00% | 1.00% | 102.32 | 4.00 | p<.001 |
| More than half of the grade | 40.00% | 38.00% | -2.00% | | | |
| About half of the grade | 28.00% | 28.00% | 1.00% | | | |
| Some, but less than half of the grade | 8.00% | 8.00% | 0.00% | | | |
| None or almost none | 2.00% | 3.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q7_C Amount of your grade from: Papers and reports | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all of the grade | 13.00% | 14.00% | 1.00% | 93.15 | 4.00 | p<.001 |
| More than half of the grade | 27.00% | 26.00% | -1.00% | | | |
| About half of the grade | 27.00% | 27.00% | 0.00% | | | |
| Some, but less than half of the grade | 19.00% | 18.00% | -1.00% | | | |
| None or almost none | 14.00% | 15.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q7_D Amount of your grade from: Independent projects | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all of the grade | 10.00% | 11.00% | 1.00% | 76.89 | 4.00 | p<.001 |
| More than half of the grade | 19.00% | 19.00% | 0.00% | | | |
| About half of the grade | 23.00% | 24.00% | 1.00% | | | |
| Some, but less than half of the grade | 26.00% | 25.00% | -1.00% | | | |
| None or almost none | 22.00% | 21.00% | -1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q7_E Amount of your grade from: Oral reports or presentations | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all of the grade | 7.00% | 9.00% | 1.00% | 172.88 | 4.00 | p<.001 |
| More than half of the grade | 14.00% | 14.00% | 0.00% | | | |
| About half of the grade | 19.00% | 20.00% | 1.00% | | | |
| Some, but less than half of the grade | 24.00% | 24.00% | 0.00% | | | |
| None or almost none | 36.00% | 34.00% | -2.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q7_F Amount of your grade from: Group projects | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all of the grade | 8.00% | 9.00% | 1.00% | 218.20 | 4.00 | p<.001 |
| More than half of the grade | 17.00% | 17.00% | 1.00% | | | |
| About half of the grade | 24.00% | 25.00% | 2.00% | | | |
| Some, but less than half of the grade | 28.00% | 26.00% | -1.00% | | | |
| None or almost none | 24.00% | 22.00% | -2.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q7_G Amount of your grade from: Work that is simply handed in and graded by the teachers | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all of the grade | 16.00% | 17.00% | 1.00% | 219.15 | 4.00 | p<.001 |
| More than half of the grade | 22.00% | 22.00% | 0.00% | | | |
| About half of the grade | 25.00% | 27.00% | 1.00% | | | |
| Some, but less than half of the grade | 28.00% | 26.00% | -3.00% | | | |
| None or almost none | 8.00% | 8.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q7_H Amount of your grade from: Work that is shared with an audience outside the classroom | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| All or almost all of the grade | 6.00% | 7.00% | 1.00% | 206.30 | 4.00 | p<.001 |
| More than half of the grade | 10.00% | 10.00% | 0.00% | | | |
| About half of the grade | 15.00% | 17.00% | 1.00% | | | |
| Some, but less than half of the grade | 20.00% | 18.00% | -2.00% | | | |
| None or almost none | 49.00% | 48.00% | -1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

Students Perceptions about School

| Q8_A In my classes, I was tested on my understanding and not just my memory. | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 24.00% | 24.00% | 1.00% | 221.30 | 4.00 | p<.001 |
| Agree | 44.00% | 41.00% | -3.00% | | | |
| Neutral | 23.00% | 25.00% | 1.00% | | | |
| Disagree | 6.00% | 6.00% | 0.00% | | | |
| Strongly Disagree | 3.00% | 4.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_B I am proud of my school. | | | | | | |
|-------------------------------|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 20.00% | 18.00% | -2.00% | 206.77 | 4.00 | p<.001 |
| Agree | 33.00% | 31.00% | -1.00% | | | |
| Neutral | 30.00% | 32.00% | 2.00% | | | |
| Disagree | 9.00% | 9.00% | 0.00% | | | |
| Strongly Disagree | 9.00% | 10.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_C I get excited about going to school. | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 8.00% | 9.00% | 1.00% | 63.73 | 4.00 | p<.001 |
| Agree | 17.00% | 17.00% | 0.00% | | | |
| Neutral | 37.00% | 37.00% | 0.00% | | | |
| Disagree | 19.00% | 18.00% | -1.00% | | | |
| Strongly Disagree | 19.00% | 19.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_D I put more effort into school this year. | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 24.00% | 19.00% | -4.00% | 1785.60 | 4.00 | p<.001 |
| Agree | 37.00% | 33.00% | -5.00% | | | |
| Neutral | 27.00% | 30.00% | 4.00% | | | |
| Disagree | 8.00% | 10.00% | 3.00% | | | |
| Strongly Disagree | 4.00% | 7.00% | 3.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_E I am able to use things I learn in one subject | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 16.00% | 16.00% | 0.00% | 182.08 | 4.00 | p<.001 |
| Agree | 40.00% | 39.00% | -2.00% | | | |
| Neutral | 29.00% | 30.00% | 2.00% | | | |
| Disagree | 10.00% | 10.00% | 0.00% | | | |
| Strongly Disagree | 4.00% | 5.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_F I feel more confident about life after high school. | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 19.00% | 20.00% | 1.00% | 118.01 | 4.00 | p<.001 |
| Agree | 36.00% | 37.00% | 0.00% | | | |
| Neutral | 32.00% | 31.00% | -1.00% | | | |
| Disagree | 8.00% | 8.00% | -1.00% | | | |
| Strongly Disagree | 4.00% | 5.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_G I feel ready for the real world, with reference to my technology skills. | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 19.00% | 20.00% | 2.00% | 193.75 | 4.00 | p<.001 |
| Agree | 35.00% | 35.00% | 0.00% | | | |
| Neutral | 32.00% | 32.00% | 0.00% | | | |
| Disagree | 10.00% | 8.00% | -2.00% | | | |
| Strongly Disagree | 4.00% | 4.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_H The work I am doing will be useful to me in my job. | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 18.00% | 17.00% | -1.00% | 252.55 | 4.00 | p<.001 |
| Agree | 35.00% | 32.00% | -3.00% | | | |
| Neutral | 29.00% | 32.00% | 2.00% | | | |
| Disagree | 11.00% | 11.00% | 0.00% | | | |
| Strongly Disagree | 7.00% | 8.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_I I have often thought about becoming a teacher. | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 11.00% | 13.00% | 2.00% | 470.17 | 4.00 | p<.001 |
| Agree | 16.00% | 17.00% | 1.00% | | | |
| Neutral | 19.00% | 22.00% | 2.00% | | | |
| Disagree | 21.00% | 19.00% | -2.00% | | | |
| Strongly Disagree | 32.00% | 29.00% | -3.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_J I think teaching mathematics or science would be fun. | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 8.00% | 10.00% | 1.00% | 337.22 | 4.00 | p<.001 |
| Agree | 15.00% | 16.00% | 1.00% | | | |
| Neutral | 21.00% | 23.00% | 2.00% | | | |
| Disagree | 21.00% | 19.00% | -2.00% | | | |
| Strongly Disagree | 34.00% | 31.00% | -2.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_K I feel challenged at this school. | | | | | | |
|--|---------|---------|--------|------------------|------|--------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 12.00% | 12.00% | 0.00% | 185.61 | 4.00 | p<.001 |
| Agree | 34.00% | 31.00% | -3.00% | | | |
| Neutral | 34.00% | 37.00% | 2.00% | | | |
| Disagree | 12.00% | 12.00% | 0.00% | | | |
| Strongly Disagree | 7.00% | 8.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_L I feel that if I work hard I can be successful in my classes | | | | | | |
|---|---------|---------|--------|------------------|------|--------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 43.00% | 38.00% | -5.00% | 1041.44 | 4.00 | p<.001 |
| Agree | 39.00% | 38.00% | 0.00% | | | |
| Neutral | 14.00% | 18.00% | 4.00% | | | |
| Disagree | 3.00% | 3.00% | 0.00% | | | |
| Strongly Disagree | 2.00% | 3.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_M In my classes, time is spent answering questions from a book or worksheet. | | | | | | |
|---|---------|---------|--------|------------------|------|--------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 13.00% | 14.00% | 0.00% | 131.79 | 4.00 | p<.001 |
| Agree | 36.00% | 34.00% | -2.00% | | | |
| Neutral | 35.00% | 37.00% | 1.00% | | | |
| Disagree | 11.00% | 11.00% | 0.00% | | | |
| Strongly Disagree | 4.00% | 4.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_N The amount and rigor my teacher assigns is pretty typical | | | | | | |
|--|---------|---------|--------|------------------|------|--------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 10.00% | 11.00% | 1.00% | 191.09 | 4.00 | p<.001 |
| Agree | 40.00% | 37.00% | -3.00% | | | |
| Neutral | 37.00% | 38.00% | 1.00% | | | |
| Disagree | 9.00% | 10.00% | 0.00% | | | |
| Strongly Disagree | 4.00% | 4.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q8_O This school is providing me with a high quality education. | | | | | | |
|---|---------|---------|--------|------------------|------|--------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Strongly Agree | 21.00% | 19.00% | -2.00% | 461.08 | 4.00 | p<.001 |
| Agree | 39.00% | 36.00% | -3.00% | | | |
| Neutral | 29.00% | 32.00% | 3.00% | | | |
| Disagree | 6.00% | 7.00% | 0.00% | | | |
| Strongly Disagree | 5.00% | 6.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q9_A Interest rating: Reading/English language arts | | | | | | |
|---|---------|---------|--------|------------------|------|--------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| The most highly interested | 17.00% | 17.00% | 1.00% | 64.57 | 4.00 | p<.001 |
| Highly interested | 16.00% | 16.00% | 0.00% | | | |
| Interested | 27.00% | 27.00% | 0.00% | | | |
| A little interested | 23.00% | 22.00% | -1.00% | | | |
| Not at all interested | 17.00% | 18.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q9_B Interest rating: Math | | | | | | |
|----------------------------|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| The most highly interested | 17.00% | 17.00% | 0.00% | 110.42 | 4.00 | p<.001 |
| Highly interested | 18.00% | 18.00% | -1.00% | | | |
| Interested | 25.00% | 24.00% | -1.00% | | | |
| A little interested | 19.00% | 19.00% | 0.00% | | | |
| Not at all interested | 20.00% | 22.00% | 2.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q9_C Interest rating: Science | | | | | | |
|-------------------------------|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| The most highly interested | 21.00% | 21.00% | 0.00% | 36.23 | 4.00 | p<.001 |
| Highly interested | 21.00% | 20.00% | -1.00% | | | |
| Interested | 26.00% | 26.00% | 0.00% | | | |
| A little interested | 18.00% | 17.00% | 0.00% | | | |
| Not at all interested | 14.00% | 15.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q9_D Interest rating: Social studies | | | | | | |
|--------------------------------------|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| The most highly interested | 19.00% | 20.00% | 0.00% | 46.29 | 4.00 | p<.001 |
| Highly interested | 21.00% | 20.00% | -1.00% | | | |
| Interested | 26.00% | 27.00% | 0.00% | | | |
| A little interested | 18.00% | 18.00% | 0.00% | | | |
| Not at all interested | 15.00% | 16.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

Quality of Technical Support

| Q10_A How long does it take to: Get a failed computer repaired | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| 1/2 - 1 hour | 16.00% | 20.00% | 3.00% | 628.37 | 5.00 | p<.001 |
| 1 - 3 hours | 17.00% | 17.00% | 0.00% | | | |
| 1/2 - 1 full day | 23.00% | 24.00% | 1.00% | | | |
| 2 - 5 days | 22.00% | 20.00% | -2.00% | | | |
| 1 - 3 weeks | 11.00% | 9.00% | -2.00% | | | |
| A month or more | 10.00% | 10.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q10_B How long does it take to: Get network services restored | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| 1/2 - 1 hour | 23.00% | 26.00% | 4.00% | 461.27 | 5.00 | p<.001 |
| 1 - 3 hours | 25.00% | 25.00% | -1.00% | | | |
| 1/2 - 1 full day | 29.00% | 29.00% | 0.00% | | | |
| 2 - 5 days | 13.00% | 11.00% | -2.00% | | | |
| 1 - 3 weeks | 5.00% | 4.00% | -1.00% | | | |
| A month or more | 5.00% | 5.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q10_C How long does it take to: Get help on a software problem or question | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| 1/2 - 1 hour | 50.00% | 49.00% | -1.00% | 90.35 | 5.00 | p<.001 |
| 1 - 3 hours | 18.00% | 18.00% | 0.00% | | | |
| 1/2 - 1 full day | 15.00% | 17.00% | 1.00% | | | |
| 2 - 5 days | 8.00% | 8.00% | 0.00% | | | |
| 1 - 3 weeks | 3.00% | 3.00% | 0.00% | | | |
| A month or more | 5.00% | 6.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

Technology Usage in the Classroom

| Q11_A Core classes use of: use a word processor | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 12.00% | 10.00% | -2.00% | 172.58 | 4.00 | p<.001 |
| Rarely | 21.00% | 20.00% | -1.00% | | | |
| Sometimes | 40.00% | 40.00% | 1.00% | | | |
| Often | 21.00% | 22.00% | 1.00% | | | |
| Almost daily | 7.00% | 8.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_B Core classes use of: use software to learn and practice skills | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 16.00% | 13.00% | -3.00% | 1031.09 | 4.00 | p<.001 |
| Rarely | 34.00% | 29.00% | -4.00% | | | |
| Sometimes | 32.00% | 36.00% | 3.00% | | | |
| Often | 13.00% | 16.00% | 3.00% | | | |
| Almost daily | 5.00% | 7.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_C Core classes use of: use a spreadsheet | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 27.00% | 27.00% | 0.00% | 102.74 | 4.00 | p<.001 |
| Rarely | 34.00% | 32.00% | -1.00% | | | |
| Sometimes | 25.00% | 27.00% | 2.00% | | | |
| Often | 10.00% | 9.00% | -1.00% | | | |
| Almost daily | 4.00% | 4.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_D Core classes use of: create a database | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 39.00% | 37.00% | -2.00% | 378.50 | 4.00 | p<.001 |
| Rarely | 31.00% | 29.00% | -2.00% | | | |
| Sometimes | 20.00% | 23.00% | 3.00% | | | |
| Often | 7.00% | 7.00% | 0.00% | | | |
| Almost daily | 3.00% | 3.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_E Core classes use of: create a presentation and present | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 12.00% | 9.00% | -3.00% | 1097.60 | 4.00 | p<.001 |
| Rarely | 33.00% | 29.00% | -4.00% | | | |
| Sometimes | 39.00% | 42.00% | 4.00% | | | |
| Often | 12.00% | 14.00% | 2.00% | | | |
| Almost daily | 4.00% | 5.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_F Core classes use of: communicate by email | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 46.00% | 42.00% | -4.00% | 489.39 | 4.00 | p<.001 |
| Rarely | 22.00% | 21.00% | -1.00% | | | |
| Sometimes | 18.00% | 21.00% | 4.00% | | | |
| Often | 9.00% | 9.00% | 0.00% | | | |
| Almost daily | 6.00% | 6.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_G Core classes use of: Use online discussions | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 46.00% | 41.00% | -6.00% | 846.48 | 4.00 | p<.001 |
| Rarely | 22.00% | 22.00% | 0.00% | | | |
| Sometimes | 20.00% | 24.00% | 4.00% | | | |
| Often | 8.00% | 9.00% | 1.00% | | | |
| Almost daily | 4.00% | 5.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_H Core classes use of: conduct Internet researches | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 8.00% | 7.00% | -1.00% | 127.25 | 4.00 | p<.001 |
| Rarely | 18.00% | 17.00% | -1.00% | | | |
| Sometimes | 39.00% | 39.00% | 0.00% | | | |
| Often | 25.00% | 26.00% | 1.00% | | | |
| Almost daily | 10.00% | 11.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_I Core classes use of: use tools, such as graphing calculators or digital microscopes | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 15.00% | 16.00% | 1.00% | 94.81 | 4.00 | p<.001 |
| Rarely | 19.00% | 19.00% | 0.00% | | | |
| Sometimes | 25.00% | 26.00% | 1.00% | | | |
| Often | 19.00% | 18.00% | -1.00% | | | |
| Almost daily | 21.00% | 21.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_J Core classes use of: produce print products | | | | | | |
|---|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 27.00% | 26.00% | -1.00% | 156.95 | 4.00 | p<.001 |
| Rarely | 27.00% | 25.00% | -2.00% | | | |
| Sometimes | 28.00% | 30.00% | 2.00% | | | |
| Often | 13.00% | 13.00% | 0.00% | | | |
| Almost daily | 6.00% | 6.00% | 0.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_K Core classes use of: create multimedia reports or projects | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 35.00% | 28.00% | -7.00% | 1298.44 | 4.00 | p<.001 |
| Rarely | 31.00% | 31.00% | 0.00% | | | |
| Sometimes | 23.00% | 28.00% | 5.00% | | | |
| Often | 8.00% | 9.00% | 1.00% | | | |
| Almost daily | 4.00% | 4.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |

| Q11_L Core classes use of: use technology to complete a test or quiz | | | | | | |
|--|---------|---------|--------|------------------|-------------|------------------|
| | Pre | Post | Change | Chi Square Value | DF | Significance |
| Never | 32.00% | 29.00% | -3.00% | 430.21 | 4.00 | p<.001 |
| Rarely | 29.00% | 28.00% | -1.00% | | | |
| Sometimes | 23.00% | 27.00% | 3.00% | | | |
| Often | 10.00% | 11.00% | 0.00% | | | |
| Almost daily | 5.00% | 5.00% | 1.00% | | | |
| Total | 100.00% | 100.00% | | | | |